**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_ Room\_\_\_\_\_\_\_\_ Grade\_\_\_\_\_**

**Brain Parts Worksheet**

Use the word bank to complete the sentences.

brain stem, cerebellum, four, frontal, occipital, parietal, temporal

Cerebral Cortex has \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ main lobes.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ does the thinking.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ deals with vision.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ senses object.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ listens.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has balance and coordination.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sets heartbeat, respiration, and other things that we need to survive.

**How the Human Brain Works Video Worksheet**

Use the word bank and the “How the Human Brain Works” video to complete the sentences.

Axon, blood pressure, brain, brain, brain stem, calories, cell body, cerebral cortex, cerebellum, charged ions, chemical, dendrites, directed, electrical, four, frontal, hippocampus, movements, networks, neurons, neurotransmitters, occipital, parietal, synapses, synaptic cleft, temporal, thalamus, vesicles

1. The most complex organ in the body is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Deep in the center of the brain is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. It controls breathing, heart rate, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Sitting atop the brain stem is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which acts as a gateway.
5. All sensory information passes through the thalamus and is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the correct part of the cerebral cortex.
6. Surrounding the thalamus is a structure called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. The folded outer surface of the brain is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
8. The brain is divided into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lobes.
9. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lobe contains the visual cortex.
10. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lobe is concerned with processing sensory and integrating it with the visual information from the occipital lobe.
11. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lobe is the center for memory and learning.
12. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lobe is probably the most important for defining us for who we are, personality, social behavior, decision making center, voluntary movement.
13. At the back are the two lobes of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Allows us to coordinate our \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so we can walk and talk, pick things up and put things down.
14. The brain takes over 1/5 of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ we consume.
15. The brain is made of billions and billions of cells called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. These are very specialized with long extensions through which they communicate and form long and complex \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
17. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Dendrites receive basic information from other neurons.
18. Signals pass through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
19. If sufficient information is received another signal is passed through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to other neurons.
20. Neurons are usually said to use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signals to communicate. But they actually use a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ process.
21. This happens at structures called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
22. Chemicals called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pass across the synapses.
23. Neurotransmitters are stored in small \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ inside the axon terminal.
24. When a signal travels down the axon one or more vesicles releases its contents into the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .
25. Neurotransmitters bind to receptacles much the way a key fits into a lock and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then recreate the signal that was sent from the previous neuron.
26. So who we really are is our \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Anatomy and Functional Areas of the Brain**

|  |  |
| --- | --- |
| 1. Sketch the left hemisphere of the brain and label the cerebrum, cerebellum and brain stem. | 1. Sketch the left hemisphere of the brain and label the four lobes, cerebellum, and brain stem |
| 1. Sketch the top of the brain and label the 3 lobes. | 1. Sketch the bottom of the brain and label the two lobes, brain stem and cerebellum. |
| 1. Sketch the left hemisphere of the brain and label the 10 functions. |  |

**The 3 parts of the brain stem and their functions Video Worksheet**

Use the word bank to complete the sentences.

autonomic, brain, brain stem, medulla, medulla pons and midbrain, midbrain, pons

1. Where the spinal cord enters the skull, it then becomes the \_\_\_\_\_\_\_\_\_.
2. The first part of the brain we enter is called the \_\_\_\_\_\_\_\_\_ .
3. The three parts of the brain stem are the\_\_\_\_\_\_\_\_\_.
4. The \_\_\_\_\_\_\_\_\_ is involved in vision, hearing, eye, movement, and body movement.
5. Then we have the \_\_\_\_\_\_\_\_\_ and that is involved in maintaining vital body functions, such as breathing and heart rate.
6. These are the \_\_\_\_\_\_\_\_\_ processes and will happen whether you think about it or not.
7. We have the \_\_\_\_\_\_\_\_\_ that is involved with motor control and sensory analysis